

Low Profile Surface Mount Power Inductors - SDR0503K-A SERIES



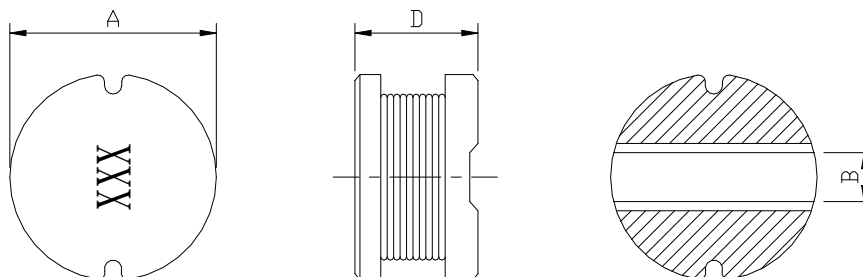
PART NUMBERING SYSTEM

(AEC-Q200)

SDR	0503K	—	221K	—	LF	—	A
TYPE	DIMENSIONS		INDUCTANCE		LEAD FREE		Automotive

SHAPES AND DIMENSIONS

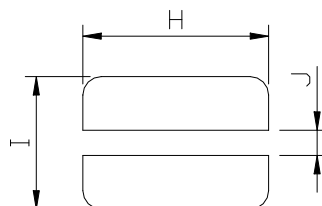
UNIT : mm



A=5.8 Max. B=1.8 Typ. D=3.9 Max.

RECOMMENDED PATTERNS

UNIT : mm



H=5.8 ref. I=6.0 ref. J=1.8 ref.

FEATURES

- Available for lead free and RoHS compliant
- Excellent solder ability and high heat resistance
- Excellent terminal strength constructions
- Small diameter of only 5.8mm maximum and low profile of 3.9mm max.

APPLICATION

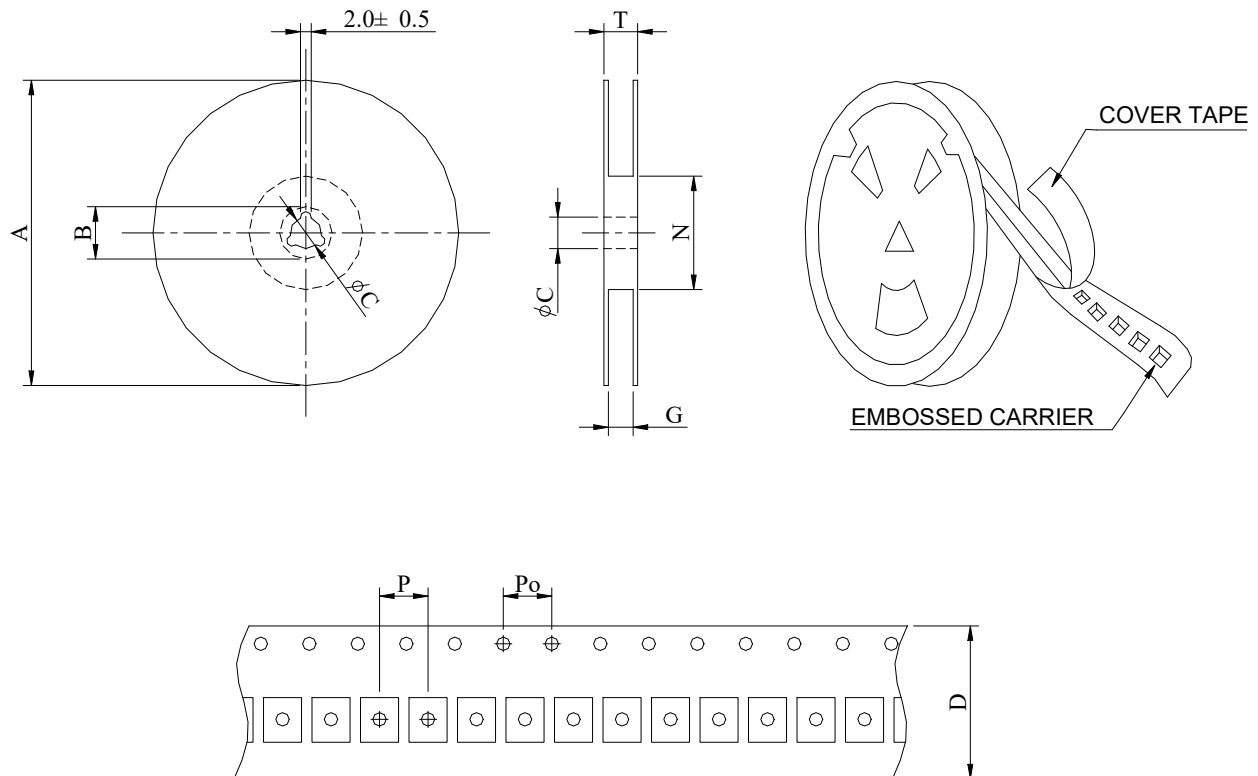
- Input / output of DC/DC converters
- Power supplies for LCD TVs , Car radios , Camcorders , Portable communication equipment

SPECIFICATION TABLE

PART NUMBER	INDUCTANCE (μ H)	Q (Ref.)	DCR (Ω) (Max.)	IDC (A) (Max.)	TEST FREQ. (MHz)
SDR0503K-1R5M-LF-A	1.2 $\pm$ 20%	24	0.04	3.00	7.96
SDR0503K-2R5M-LF-A	1.5 $\pm$ 20%	21	0.05	2.35	7.96
SDR0503K-3R3M-LF-A	3.3 $\pm$ 20%	21	0.05	2.20	7.96
SDR0503K-3R9M-LF-A	3.9 $\pm$ 20%	22	0.05	2.10	7.96
SDR0503K-4R7M-LF-A	4.7 $\pm$ 20%	20	0.07	1.80	7.96
SDR0503K-5R6M-LF-A	5.6 $\pm$ 20%	19	0.07	1.60	7.96
SDR0503K-6R8M-LF-A	6.8 $\pm$ 20%	19	0.11	1.38	7.96
SDR0503K-7R5M-LF-A	7.5 $\pm$ 20%	19	0.12	1.29	7.96
SDR0503K-100M-LF-A	10 $\pm$ 20%	24	0.15	1.14	2.52
SDR0503K-120M-LF-A	12 $\pm$ 20%	23	0.16	1.02	2.52
SDR0503K-150M-LF-A	15 $\pm$ 20%	22	0.18	0.93	2.52
SDR0503K-180M-LF-A	18 $\pm$ 20%	23	0.25	0.82	2.52
SDR0503K-220M-LF-A	22 $\pm$ 20%	20	0.28	0.75	2.52
SDR0503K-270M-LF-A	27 $\pm$ 20%	19	0.30	0.67	2.52
SDR0503K-330K-LF-A	33 $\pm$ 10%	23	0.45	0.61	2.52
SDR0503K-390K-LF-A	39 $\pm$ 10%	22	0.46	0.56	2.52
SDR0503K-470K-LF-A	47 $\pm$ 10%	20	0.55	0.52	2.52
SDR0503K-560K-LF-A	56 $\pm$ 10%	17	0.62	0.48	2.52
SDR0503K-680K-LF-A	68 $\pm$ 10%	17	0.72	0.44	2.52
SDR0503K-820K-LF-A	82 $\pm$ 10%	15	0.84	0.40	2.52
SDR0503K-101K-LF-A	100 $\pm$ 10%	28	0.95	0.38	0.796
SDR0503K-121K-LF-A	120 $\pm$ 10%	27	1.10	0.36	0.796
SDR0503K-151K-LF-A	150 $\pm$ 10%	28	1.43	0.32	0.796
SDR0503K-181K-LF-A	180 $\pm$ 10%	26	1.60	0.30	0.796
SDR0503K-221K-LF-A	220 $\pm$ 10%	26	2.00	0.26	0.796
SDR0503K-271K-LF-A	270 $\pm$ 10%	26	2.40	0.24	0.796
SDR0503K-331K-LF-A	330 $\pm$ 10%	28	3.20	0.20	0.796
SDR0503K-391K-LF-A	390 $\pm$ 10%	28	3.40	0.18	0.796
SDR0503K-471K-LF-A	470 $\pm$ 10%	29	4.55	0.15	0.796

- DC current at which the inductance drops 10% (typ) from its value without current.
- Operating temperature range -40°C to +125°C ,
- Electrical specifications at 25°C.
- Packing : 13" reel, machine-ready ,embossed plastic tape (1,500 parts per full reel).

PACKAGING SPECIFICATION



SERIES	Q'TY (PCS)	DIMENSIONS (m/m)							
		A	B ± 0.8	C ± 0.5	D	G $^{+0}$	N $^{-0}$	P	Po
SDR0503K-A	1500	330	21	13	12	14	50	8	4